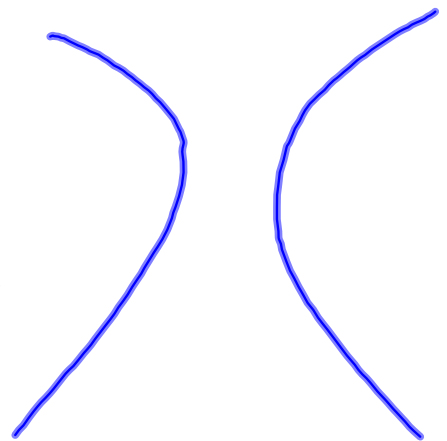
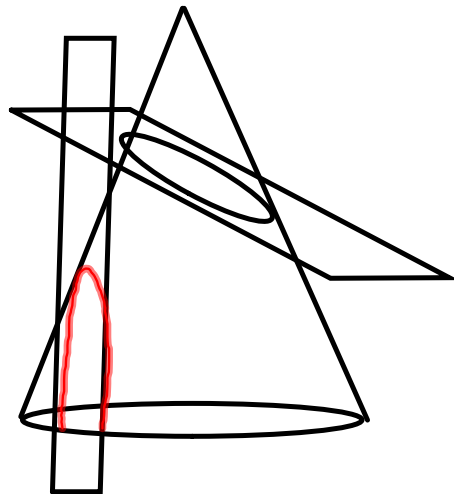


<http://www.quia.com/pages/mdickens/alg2b>

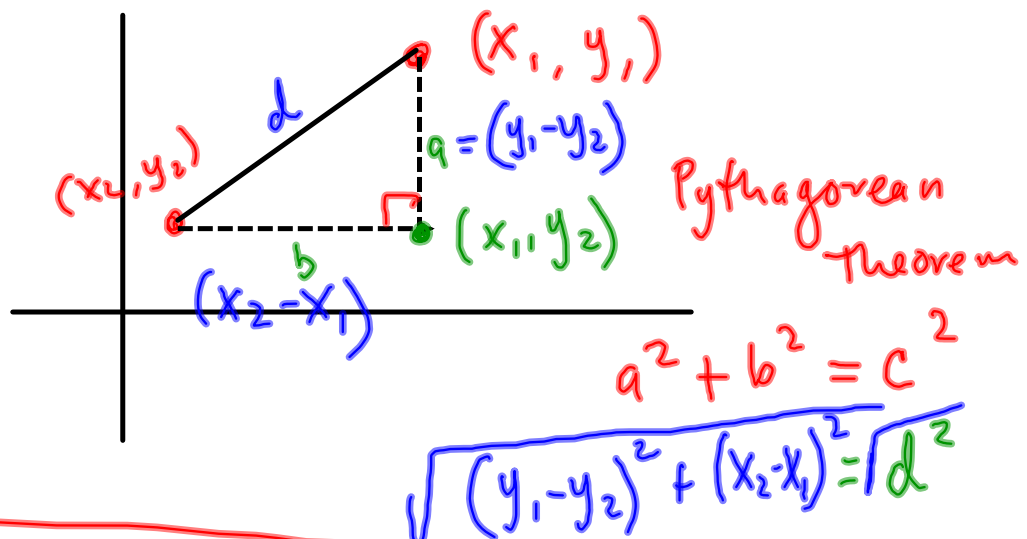
- Online Baldrige class survey.
- Not anonymous
- Be serious this is for your benefit

Chapter 9 - Conic Sections (circles, parabolas, ellipses, hyperbolas)



Distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$



Midpoint

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Average of the x 's & y 's

Find the distance & midpt
between. $(-3, 5)$ $(2, 7)$

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$d = \sqrt{(2 - (-3))^2 + (7 - 5)^2}$$

$$d = \sqrt{(5)^2 + (2)^2}$$

$$= \sqrt{25 + 4} = \sqrt{29} = 5.38$$

P
E
M
D
+
5

or

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

$$(-3, 5) \quad (2, 7) \quad \swarrow \text{distance}$$

$$\left(\frac{-3 + 2}{2}, \frac{5 + 7}{2} \right) = \left(\frac{-1}{2}, \frac{12}{2} \right)$$

$$= \boxed{\left(-\frac{1}{2}, 6 \right)} \quad \leftarrow \text{midpt.}$$

P 617 # 4, 5

4) $(0,0)$ $(4,2)$

5) $(0,6)$ $(5,-4)$

Distance
Midpoint

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\text{Midpt} = \left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right)$$

